

# Core Instruction Evidence-Based Strategies Checklist/Self-Assessment

<b>Teacher:</b>	<b>Grade:</b> 6 7 8	<b>Topic/Lesson:</b>
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*Based on your knowledge of the curriculum and your day to day lessons. Review each of these Focus Areas and determine if these elements are present in your instruction, the student responses to your instruction, and the work given to students.*

Focus Areas	Present?	Evidence
What does the teacher do?		
<b>Number Sense</b>		
Ask students to estimate/predict		
Ask students to check reasonableness of solutions		
Ask students to apply and discuss multiple strategies		
Ask students to use multiple representations of thinking and work (e.g. tables, pictures, graphs, words)		
Present content through the CRA model (concrete, representational, abstract), including use of manipulatives		
<b>Proportional Reasoning</b>		
Use authentic problems/rich tasks		
Pose higher order thinking questions		
Give students opportunities to discuss reasoning, strategies, thinking		
Ask students to consider and discuss multiple strategies		
<b>Algebraic Thinking</b>		
Ask students to explain and use reasonable strategies		
Ask students to look for and discuss patterns		
Ask students to apply multiple strategies		
Ask students to use multiple representations of thinking and work (e.g. tables, pictures, graphs, words)		
Use authentic problems/rich tasks		

Present content through the CRA model (concrete, representational, abstract), including use of manipulatives		
What does the student do?		
Number Sense		
Students reasonably estimate/predict solutions to problems		
Students check and justify reasonableness of solutions		
Students apply multiple strategies in problem solving		
Students use multiple representations (e.g. tables, pictures, graphs, words)		
Students can use manipulatives appropriately and productively		
Students make connections between concrete and representational models		
Students can make generalizations and abstractions from concrete and representational models		
Proportional Reasoning		
Students apply multiple strategies in solving proportions problems		
Students identify a situation as proportional in an authentic context or application		
Students explain their proportional reasoning and justify solution		
Algebraic Thinking		
Students recognize and describe patterns in variety of contexts		
Students will apply patterns to make predictions		
Students use multiple representations (e.g. tables, pictures, graphs, words)		
Students can use manipulatives appropriately and productively		
Students make connections between concrete and representational models		
Students can make generalizations and abstractions from concrete and representational models		
Students apply algebraic reasoning to an authentic problem or task		

## What does student work look like?

Number Sense		
Estimations and prediction are made prior to computation		
Reasonableness of solutions is assessed after a solution is found		
Student work fosters application of multiple strategies		
Student work presents opportunity for multiple representations (e.g. tables, pictures, graphs, words)		
Proportional Reasoning		
Includes authentic proportions problems and rich tasks		
Students are asked to explain their work and justify their reasoning		
Student work presents opportunities for multiple proportions strategies		
Algebraic Thinking		
Students will be asked to explain and use reasonable strategies		
Students are asked to identify patterns and use them to make predictions		
Student work presents opportunities to apply multiple strategies		
Student work presents opportunity for multiple representations (e.g. tables, pictures, graphs, words)		
Students work presents opportunities for using manipulatives appropriately and productively		
Students work presents opportunities to construct representational models		
Students apply generalizations and abstractions from concrete and representational models		

**Content:** Number Sense, Proportional Reasoning, Algebraic Thinking

**Unit/Lesson:**

**Evidence Based Strategies**

- Making Predictions & Determining the Reasonableness of Solutions
- CRA Model
- Using Multiple Strategies
- Multiple Representations
- Use of Manipulatives
- Authentic Problems and Rich Tasks
- Recognize and Describe Patterns
- Explain, Strategies, Reasoning, and Justify Thinking

Observation Examples-	Present in Lesson? Unit?	Student Response?	Student work?	Evidence/ Feedback


**Content:** Number Sense, Proportional Reasoning, Algebraic Thinking

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<b>Observation Examples-Making Predictions &amp; Determining the Reasonableness of Solutions</b>	<b>Present in Lesson? Unit?</b>	<b>Student Response?</b>	<b>Student work?</b>	<b>Evidence/ Feedback</b>
Students are asked to explain and use reasonable strategies				
Students are asked to estimate/predict				
Students are asked to check reasonableness of solutions				
Students are asked to identify patterns and use them to make predictions				
Estimations and prediction are made prior to computation				
Reasonableness of solutions is assessed after a solution is found				
Students apply patterns to make predictions				
Students reasonably estimate/predict solutions to problems				
Students check and justify reasonableness of solutions				



**Content:** Number Sense, Proportional Reasoning, Algebraic Thinking

**Unit/Lesson:**

**Evidence Based Strategies**

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	<b>Present in Lesson? Unit?</b>	<b>Student Response?</b>	<b>Student work?</b>	<b>Evidence/ Feedback</b>
<b>Observation Examples- CRA model</b>				
Content is presented through the CRA model (concrete, representational, abstract), including use of manipulatives				
Students make connections between concrete and representational models				
Students work presents opportunities to construct representational models				
Students can make generalizations and abstractions from concrete and representational models				
Students apply generalizations and abstractions from concrete and representational models				

<b>Content:</b> Number Sense, Proportional Reasoning, Algebraic Thinking	<b>Unit/Lesson:</b>
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<b>Evidence Based Strategies</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Making Predictions</li> <li><input type="checkbox"/> Determining the Reasonableness of Solutions</li> <li><input type="checkbox"/> CRA Model</li> <li><input type="checkbox"/> Using Multiple Strategies</li> <li><input type="checkbox"/> Multiple Representations</li> <li><input type="checkbox"/> Use of Manipulatives</li> <li><input type="checkbox"/> Authentic Problems and Rich Tasks</li> <li><input type="checkbox"/> Recognize and Describe Patterns</li> <li><input type="checkbox"/> Explain, Strategies, Reasoning, and Justify Thinking</li> </ul>				
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Observation Examples- Using Multiple Strategies	Present in Lesson? Unit?	Student Response?	Student work?	Evidence/ Feedback
Students will be asked to consider, apply, and discuss multiple strategies				
Student work presents opportunities to apply multiple strategies				



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Observation Examples-Multiple Representations	Present in Lesson? Unit?	Student Response?	Student work?	Evidence/ Feedback


<b>Content:</b> Number Sense, Proportional Reasoning, Algebraic Thinking			<b>Unit/Lesson:</b>	
<b>Evidence-Based Strategies</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Making Predictions</li> <li><input type="checkbox"/> Determining the Reasonableness of Solutions</li> <li><input type="checkbox"/> CRA Model</li> <li><input type="checkbox"/> Using Multiple Strategies</li> <li><input type="checkbox"/> Multiple Representations</li> <li><input type="checkbox"/> Use of Manipulatives</li> <li><input type="checkbox"/> Authentic Problems and Rich Tasks</li> <li><input type="checkbox"/> Recognize and Describe Patterns</li> <li><input type="checkbox"/> Explain, Strategies, Reasoning, and Justify Thinking</li> </ul>				
<b>Observation Examples-</b> Use of Manipulatives	<b>Present in Lesson? Unit?</b>	<b>Student Response?</b>	<b>Student work?</b>	<b>Evidence/ Feedback</b>


<b>Content:</b> Number Sense, Proportional Reasoning, Algebraic Thinking			<b>Unit/Lesson:</b>	
<b>Evidence-Based Strategies</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Making Predictions</li> <li><input type="checkbox"/> Determining the Reasonableness of Solutions</li> <li><input type="checkbox"/> CRA Model</li> <li><input type="checkbox"/> Using Multiple Strategies</li> <li><input type="checkbox"/> Multiple Representations</li> <li><input type="checkbox"/> Use of Manipulatives</li> <li><input type="checkbox"/> Authentic Problems and Rich Tasks</li> <li><input type="checkbox"/> Recognize and Describe Patterns</li> <li><input type="checkbox"/> Explain, Strategies, Reasoning, and Justify Thinking</li> </ul>				
<b>Observation Examples</b> -Authentic Problems and Rich Tasks	<b>Present in Lesson? Unit?</b>	<b>Student Response?</b>	<b>Student work?</b>	<b>Evidence/ Feedback</b>


<b>Content:</b> Number Sense, Proportional Reasoning, Algebraic Thinking			<b>Unit/Lesson:</b>	
<b>Evidence-Based Strategies</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Making Predictions</li> <li><input type="checkbox"/> Determining the Reasonableness of Solutions</li> <li><input type="checkbox"/> CRA Model</li> <li><input type="checkbox"/> Using Multiple Strategies</li> <li><input type="checkbox"/> Multiple Representations</li> <li><input type="checkbox"/> Use of Manipulatives</li> <li><input type="checkbox"/> Authentic Problems and Rich Tasks</li> <li><input type="checkbox"/> Recognize and Describe Patterns</li> <li><input type="checkbox"/> Explain, Strategies, Reasoning, and Justify Thinking</li> </ul>				
<b>Observation Examples-</b> Recognize and Describe Patterns	<b>Present in Lesson? Unit?</b>	<b>Student Response?</b>	<b>Student work?</b>	<b>Evidence/ Feedback</b>

Students are asked to identify patterns and use them to make predictions				

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### Evidence-Based Strategies

- Making Predictions
- Determining the Reasonableness of Solutions
- CRA Model
- Using Multiple Strategies
- Multiple Representations
- Use of Manipulatives
- Authentic Problems and Rich Tasks
- Recognize and Describe Patterns
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Observation Examples- Explain, Strategies, Reasoning, and Justify Thinking	Present in Lesson? Unit?	Student Response?	Student work?	Evidence/ Feedback
Give students opportunities to discuss reasoning, strategies, thinking				